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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/389,082	09/02/1999	STEPHEN PETER FITZGERALD	104161	4878

25944 7590 05/09/2002

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EXAMINER

CROSS, LATOYA I

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 05/09/2002

16

Please find below and/or attached an Office communication concerning this application or proceeding.

1.D-11

Office Action Summary

Application No.

09/389,082

Applicant(s)

FITZGERALD ET AL.

Examiner

LaToya I. Cross

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Prosecution Application

1. The request filed on March 20, 2002 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/389,082 is acceptable and a CPA has been established. An action on the CPA follows. Claims 1-13 and 15-19 are pending.

Withdrawal of Rejections from Previous Office Action

- The rejection of claims 1-4, 6, 8-13 and 15-19 under 35 USC 102 over Beattie '767 is withdrawn in view of Applicants' amendment reciting the chip to be separate from the base.
- The rejection of claims 5 and 7 under 35 USC 103 over Beattie in view of Albon is withdrawn in view of Applicants' amendment reciting the chip to be separate from the base.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1, 2, 4, 6, 9, 10 and 17-19 are rejected under 35 U.S.C. 102(a) as being anticipated by US Patent 5,945,334 to Besemer et al (hereinafter Besemer et al '334).

Besemer et al '334 teach an apparatus for packaging a chip. The chip is a substrate

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having an array of probes fabricated onto its surface. The probes are surface immobilized molecules. A body containing a cavity is provided, wherein the chips are disposed within the cavity. Figure 1b shows a chip that has been separated from a wafer. The chip (120) contains a probe array (110). The packaging (300) contains a cavity (310) into ^{which} the chip is disposed. The packaging is manufactured from injection-molded plastic (col. 6, lines 50-51). In figure 31, the flat bottom portion of the middle casing and portions of the bottom casing including the edges define the cavity (3405). The chip is placed in the bottom portion overlying the cavity. Support structures (3201 and 3203) exist in the packaging to hold the chip in position. Also, a ridge (560) may be provided to support the chip above the cavity. The size of the cavity, as well as the shape or orientation, may be adjusted to any size suitable for the needs of the user (col. 7, lines 1-5). Regarding method claims 17-19, Besemer et al '334 teaches that a cavity, having side walls and a base are formed from casings and the chip is disposed within the cavity.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be anticipated, within the meaning of 35 USC 102, in view of the teachings of Besemer et al '334.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 3, 5, 7, 8, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Besemer et al '334 in view of Great Britain publication 2,147,698 to Albon et al.

Besemer et al '334 is discribed in detail above.

While Besemer et al '334 teaches ridges to retain the chips in the cavity, Besemer et al '334 fail to disclose the use of hot or cold formed projections for doing so. Also, Besemer et al do not disclose a plurality of carrying trays arranged in a stack.

The use of projections in storage wells for holding assay items in place is ^{conventional} ~~convention~~ as shown by Albon et al '698. Albon et al '698 teach a test apparatus for immunoassay comprising a holder having a plurality of inserts for reaction wells and a tray having a plurality of reactions wells. The inserts are removably mountable in the holder via "stud and socket" press fitting or screw mounting or by adhesive bonding.

It would have been obvious to one of ordinary skill in the art to use such projections in place of the ridges taught by Besemer et al '334 to provide a manner in which the projections could be removed when the chip is removed from the cavity. The manner in stacking carrying trays would have been obvious to allow easy packaging and easier shipping.

Therefore, for the reasons set forth above, Applicants' claimed invention is deemed to be obvious, within the meaning of 35 USC 103 in view of the teachings of Besemer et al '334 and Albon et al '698.

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Response to Arguments


7. Applicant's arguments with respect to all pending claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya I. Cross whose telephone number is 703-305-7360. The examiner can normally be reached on Monday-Friday 8:30 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 703-308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

LIC
May 2, 2002


Jill Warden
Supervisory Patent Examiner
Technology Center 1700